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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,430

01/28/2005

Jean-Christophe Lallemand

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

KURR, JASON RICHARD

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/523,430	Applicant(s) LALLEMAND, JEAN-CHRISTOPHE	
	Examiner Jason R. Kurr	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/31/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 6-8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend upon another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6, 8 and 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claim 6, Applicant discloses "algorithm for processing a stereo input signal". When nonfunctional descriptive material such as algorithms (See Benson, 409 U.S. 63, 175 USPQ 673) are recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8.

With respect to claim 8, Applicant discloses "a computer program capable of

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running on signal processing means". Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and the other claimed elements of a computer, which permit the computer program's functionality to be realized. The Applicant has not claimed a computer-readable medium encoded with a computer program, therefore a computer element is not defined as a structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and thus is not statutory. See *Lowry*, 32 F.3d at 1583-84 USPQ2d at 1035.

With respect to claim 9, Applicant discloses "an information carrier, carrying instructions to be executed by signal processing means". Claims that recite nothing but the physical characteristics of a form of energy, such as frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. *O'Reilly*, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories or patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura (US 5,550,920).

With respect to claim 1, Nomura discloses a method for eliminating voice signals from a stereo input signal stream by means of a band stop filter device (fig.5 #13,37, col.4 ln.44-49), characterized in that from the stereo input signal stream a monophonic and a stereophonic signal stream is derived by adding and subtracting, respectively, the left and right signal content of the stereo input signal stream (fig.5 #11,12), the monophonic signal stream is filtered by means of said band stop filter device. Nomura does not disclose expressly in the embodiment shown in figure 5, wherein a stereo output signal is obtained by adding and subtracting the stereophonic and monophonic signals. However, Nomura does disclose in the embodiment shown in figure 2, wherein the stereo output signal stream is obtained by adding the stereophonic signal stream and the filtered monophonic signal stream, and subtracting the stereophonic signal stream and the filtered monophonic signal stream, respectively (fig.2 #23,22, col.2 ln.42-63, col.5 ln.34-43). At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the stereo output generation method of

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Nomura's embodiment of figure 2 in the embodiment of figure 5. The motivation for doing so would have been to eliminate the use of an extra phase shifter. This would have saved production costs, hence providing a consumer with a less expensive product.

With respect to claim 2, Nomura discloses a voice suppression filter device for eliminating voice signals from a stereo input signal stream by means of a band stop filter device (fig.5 #13,37, col.4 ln.44-49), characterized in that a first adding and a first subtracting device are provided to derive from the stereo input signal stream a monophonic and a stereophonic signal stream by adding and subtracting, respectively, the left and right signal content of the stereo input signal stream (fig.5 #11,12), the monophonic signal stream being filtered by means of said band stop filter device. Nomura does not disclose expressly in the embodiment shown in figure 5, wherein a stereo output signal is obtained by adding and subtracting the stereophonic and monophonic signals in a second device. However, Nomura does disclose in the embodiment shown in figure 2, wherein the stereo output signal stream is obtained by adding the stereophonic signal stream and the filtered monophonic signal stream, and subtracting the stereophonic signal stream and the filtered monophonic signal stream, respectively (fig.2 #23,22, col.2 ln.42-63, col.5 ln.34-43). At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the stereo output generation method of Nomura's embodiment of figure 2 in the embodiment of figure 5. The motivation for doing so would have been to eliminate the use of an extra phase

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shifter. This would have saved production costs, hence providing a consumer with a less expensive product.

With respect to claim 3, Nomura discloses a voice suppression filter device according to claim 2, characterized in that parallel to the band stop filter device a low pass filter device (fig.5 #13) is provided, the upper side of the frequency band thereof being adjacent to the lower side of the frequency band of the band stop filter device (col.3 ln.25-36).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura (US 5,550,920) in view of Iida et al (US 5,761,315).

With respect to claim 4, Nomura discloses the voice suppression filter device according to claim 2 or 3, however does not disclose expressly characterized in that a downscaling device is provided to protect the band stop filter device against overflow. Iida discloses a signal processing apparatus wherein a downscaling device is provided to protect a filter device against overflow (col.15 ln.26-63). At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the scaling of Iida to prevent overflow in the band stop filter of Nomura. The motivation for doing so would have been to prevent distortions from occurring in the signal.

With respect to claim 5, Nomura discloses the voice suppression filter device according to claim 3, however does not disclose expressly characterized in that a gain element is provided to obtain an asymmetry between the channels for the monophonic

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and the stereophonic signal stream. Iida discloses a signal processing apparatus wherein to obtain asymmetry between signal channels a gain element is provided (col.15 ln.26-63). At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the scaling of Iida to obtain a balance between channels of Nomura. The motivation for doing so would have been to provide the system with a correct presentation of stereophonic sound localization.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Laroche (US 6,405,163 B1) discloses a process for removing voice from stereo recordings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Kurr whose telephone number is (571) 272-0552. The examiner can normally be reached on M-F 10:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 273-8300. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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